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Continuing Interest in New Developments  
(so-called [REDACTED] Project)

25X1A5a1

27 July 1951

25X1A9a

[REDACTED] - developing of a code system for the  
test run on the Luhn IBM machines

In Folder "Chrono 1951" Box 58-98/6

In Folder "Machine Div 1947-58" Box 60-548/1

25X1A5a1

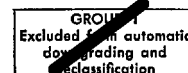
25X1A5a1

25X1A9a Letter from [REDACTED] to Mr. [REDACTED] in Washington 27 July 51

Luhn equipment was made available to the Agency for experimental purposes from 1 July through 20 July 51. All Agency personnel who participated in the experiment believe that the machines open up the possibility of developing a machine indexing method for searching reference material on a scale adequate to meet Agency requirements. A project is being established to develop such an indexing system which will be designed to fully utilize the potential of the "Luhn" machines and which will serve the needs of this Agency as well as other Govt. departments such as AEC, IC and Patent Office, etc. In order to test the indexing system during the development period, it will be necessary to have a unit of machines available for processing a limited amount of indexed material.

OSI provided a demonstration on 12-18 July showing limited application within OSI in conjunction with OCD

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25X1A9a

Project

The project consisted of three principal studies:

1. The processing of scientific and technical terminology in order to construct a coding system
2. The development of methods for discerning and designating relationships of the type exemplified by "Man bites dog"
3. The testing of the entire indexing method by applying a portion of the coding system to actual intelligence material.

The encoding of each word or phrase as such will relate it to other terminology useful for machine searching. Thus the encoding of a document dealing with "man/bites" dog" will simultaneously make that document ~~searchable~~ searchable under "mammal" and "animal." In order that this use of generic terminology can be accomplished efficiently, a comprehensive coding system is being constructed from the terminology of science and technology. Secondly, the encoding system will indicate certain general relationships between the things, persons, processes, attributes, effects, etc. with which a document is concerned. This portion of the coding will distinguish "Man bites dog" from "dog bites man."

By November 1952 Andrews wrote AD/OIC that he did not feel that much of tangible benefit would be gained by the project and he did not approve of an extension of the contract. However, he would not obstruct it if others (primarily OSI) felt sure of their ground.

*Andrews' note on bottom of AD/OIC's memo, 1st 20 Nov 52 re AD's in CD/51 & (chief, Aug 58 method)*  
*Folder OIC 1952 Box 58-98/4*

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Machine Division Other Interests (than Intellofax)

In line with its mission to keep abreast with developments in the machine world and to act as a sort of consultant to other parts of the Agency

Charged with the responsibility for the development and efficient operation

Secret of special machines and equipment for OCD, and for ~~research and advice~~  
 " How to Use the Facilities and Services of OCD" ~~on such matters, the machine experts~~ providing advisory services for CIA offices and IAC agencies on the availability and use of machine methods and equipment for intelligence operations, the machine ~~experts~~ were always looking for and experimenting with new types of equipment.

In 1950 the MD received <sup>the</sup> requirement for a rapid copying method of materials found in other offices of the government as well as in the offices of private concerns. This device would have to be portable, of light weight and simple to operate, if possible. In Feb. 1951 Memo from 25X1A9a 25X1A5a1  
 Dear to Chief, Procurement, 12 Sept 51 [redacted] went to the [redacted] and presented MD's ideas for a copying device. In Aug. 1951 a model was procured and found to be satisfactory for the job. The device was shown to a considerable number of persons in OCD, OCI, OSO, ORR and Admin Services, was well received and 13 orders were placed. MD <sup>Based upon</sup> then recommended that it <sup>was</sup> be made a stock item.

Reason for purchase  
 of [redacted]  
 copy machine  
 admin. [redacted]  
 all [redacted]  
 7-1-52  
 [redacted]  
 [redacted]  
 in [redacted]  
 to all [redacted]

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32) *mach Div Monthly Reports 1964-66 71-18*  
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Impact of CHIVE

In July 1965 ~~the~~ OCR set forth the personnel requirements for  
Project <sup>25X1A2g</sup> [redacted]. Of the 54 positions established, five were deleted from  
MD. (Source: Memo, AD/CT to Executive Director-Comptroller, 29 Oct 65  
<sup>25X1A2g</sup>  
sub: Personnel Requirements-Project [redacted] S. Chrono 1965 71-21

33) *There was actually no  
final to the <sup>operations</sup> MD. ~~the~~ same  
activities combined as MSD & are  
described in chapter  
(See System Page)*

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## Printout Equipment

1. Facsimile Equipment 3 - 1959
  - a. Intellofax card feed into Transmitter
  - b. Information transmitted from card to a receiver
  - c. Receiver printed card on continuous tape 4" wide
  - d. Tape was chemically treated wet paper developed electronically and dried by heat
2. Card List Camera - Photostat (Special) 1959-63
  - a. Intellofax card feed into Camera
  - b. Card exposed onto a continuous 4" tape of photographic paper
  - c. Continuous tape of photographic was developed in a special photostat machine
  - d. Final document printed on a standard photostat
3. Card feeder - Photostat (Standard) 1963-65
  - a. Intellofax card feed into card feeder
  - b. Card exposed onto continuous 4" tape of photographic paper and cut about 8" long.
  - c. Cut tape developed by standard photostat
  - d. Final document printed on a standard photostat + 3rd Quadrant after 1965
4. Rare Enlarger 1963-68
  - a. Rare card feed into rare enlarger
  - b. Information optically transferred by Xerographic method to paper and enlarged.

Source cam.

Boyle

over

- c. Information on data card is the first page of document.
- d. If document on data card contained more than one page the entire document <sup>(from system)</sup> was printed on a photostat.

Printout on 3M Quadrant after 1965

5. Computer

- a. Computer listings used to pull documents on operation cards.

b. Printout on 3M Quadrant 1965-69  
" " " 148A Reader Printer  
1969-72

c. " " " 148B Reader Printer  
1972-